

**EQUATION 1 — GROUP R OCCUPANCY
TARGET UA**

$$UA_T = U_W A_W + U_{BGW} A_{BGW} + U_{VG} A_{VG} + U_{OG} A_{OG} + U_F A_F + U_{RC} A_{RC} + U_{CC} A_{CC} + U_D A_D + F_S P_S$$

Where:

UA_T	=	the target combined thermal transmittance of the gross exterior wall, floor and roof/ceiling assembly area.
U_W	=	the thermal transmittance value of the opaque above grade wall area found in Table 5-1.
A_W	=	opaque above grade wall area.
U_{BGW}	=	the thermal transmittance value of the below grade opaque wall area found in Table 5-1.
A_{BGW}	=	opaque below grade wall area.
U_{VG}	=	the thermal transmittance value of the vertical glazing area found in Table 5-1.
A_{VG}	=	15% of the total floor area of the conditioned space minus A_{OG} .
U_{OG}	=	the thermal transmittance value of the overhead glazing area found in Table 5-1.
A_{OG}	=	overhead glazing area (if the proposed A_{OG} exceeds 15 percent, the target A_{OG} shall be 15 percent of the total floor area of the conditioned space).
U_F	=	the thermal transmittance value of the floor area found in Table 5-1.
A_F	=	floor area over unconditioned space.
U_{RC}	=	the thermal transmittance value of the roof/ceiling area found in Table 5-1.
A_{RC}	=	roof/ceiling area.
U_{CC}	=	the thermal transmittance value of the cathedral ceiling area found in Table 5-1.
A_{CC}	=	cathedral ceiling area.
U_D	=	the thermal transmittance value of the opaque door area found in Table 5-1.
A_D	=	opaque door area.
F_S	=	concrete slab component F-factor found in Table 5-1.
P_S	=	lineal ft. of concrete slab perimeter.